

CONSTRUCTION SPECIFICATION

VA-727. DIVERSIONS & WATERWAYS

1. SCOPE

The work consists of all excavations, shaping, grading, and earthfills required to construct diversions and waterways as shown on the drawings or at locations as directed by the NRCS or SWCD representative. Stone centers and subsurface drainage may be used to control continuous seasonal flows or springs and high water tables.

2. MATERIAL

The earth material used in constructing the diversion or waterways shall be suitable material obtained from required excavations or designated borrow areas. The earth material shall contain no frozen soil, rocks greater than 6 inches in diameter, sod, brush or other objectionable material.

3. FOUNDATION PREPARATION

The foundation area of fill sections shall be cleared and grubbed, stripped of unsuitable material and scarified prior to placing fill. Available topsoil shall be salvaged and stockpiled for later spreading. Vertical banks shall be shaped to a 2:1 or flatter slope.

4. PLACEMENT

Fill shall not be placed until the required excavation and foundation preparation has been completed and the foundation has been inspected and approved by the NRCS or SWCD representative. Earthfill shall not be placed when the ground is frozen or excessively wet. Snow, ice or frozen material shall not be incorporated in the fill.

Fill will be started at the lowest part of the section under construction and will be placed in approximately uniform horizontal layers of not more than 9 inches in thickness prior to compaction to the lines and grades shown on the drawings. The moisture content of the fill material shall be such that when kneaded in the hand, the soil forms a ball which does not readily separate. Fill materials shall be placed and spread in layers not over 9 inches thick.

The fill material shall be compacted by routing the hauling and spreading equipment over the fill in such a manner that the entire surface of each layer of the completed ridge will be traversed by not less than one tread track of the equipment or equivalent methods approved by the NRCS or SWCD representative.

5. EXCAVATION

Excavation shall be to the lines and grades shown on the drawings. All surplus or unsuitable excavated materials shall be disposed of at the locations shown on the drawings or at locations approved by the NRCS or SWCD representative.

6. TOPSOIL SPREADING

Stockpiled topsoil shall be spread on the diversion or waterway flow area to a depth of not less than 3 inches unless otherwise approved by the NRCS or SWCD representative. The topsoil shall be placed to form a positive final grade into the diversion or waterway at all points along the length of the structure.

Topsoil shall not be spread when the ground or topsoil is frozen, excessively wet or otherwise in a condition detrimental to the work. The topsoil surface shall be finished to a reasonably smooth surface.

7. SEEDING

During and/or immediately following construction, the diversion or waterway shall be prepared, limed, fertilized, seeded and mulched in accordance with Construction Specification VA-706, Seeding.